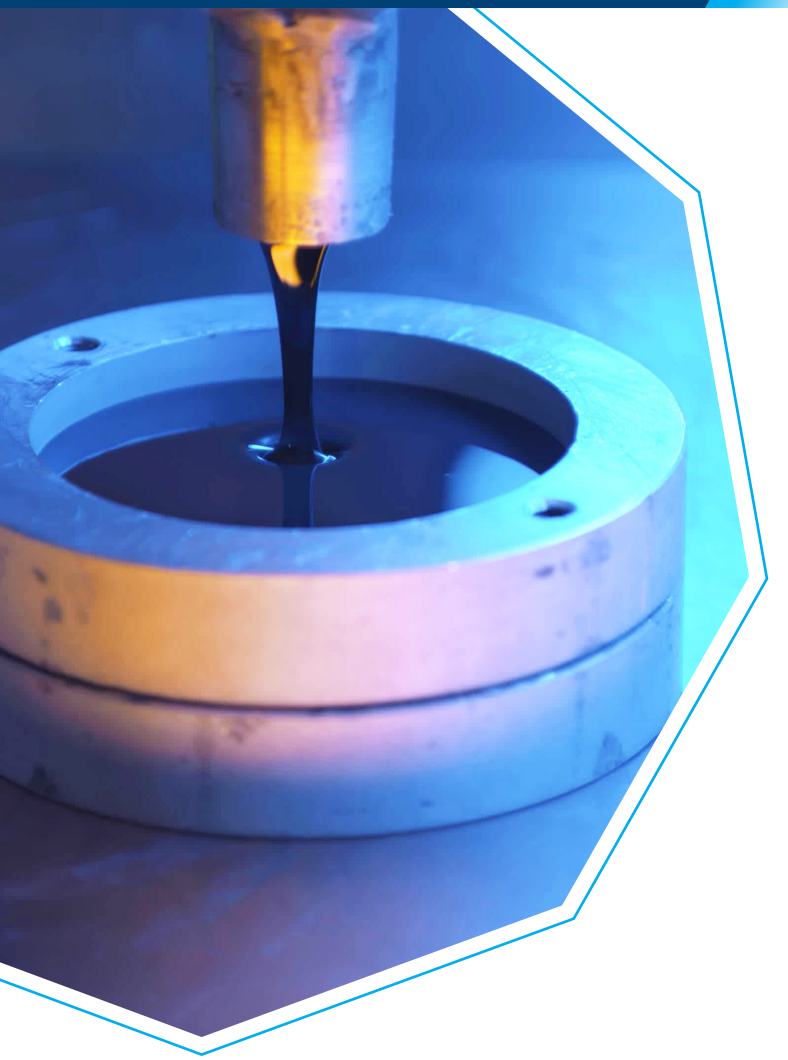
ASKOCOAT™



A NOVEL CORROSION PROTECTION POLYOL TO IMPROVE ADHESION AND FINAL HARDNESS IN 2K-PU POURING COMPOUNDS

2K-PU pouring compounds are suitable as protective coatings, especially for electrotechnical applications, due to their high electrical insulation properties and excellent hydrolysis resistance in the cured state.

In addition, a performing 2K polyurethane system must provide a high level of adhesion, impact strength and corrosion protection, while exhibiting no or as little shrinkage as possible after curing.

Castor oil is a sustainable polyol component. As a 100% biobased raw material it is a sustainable raw material, but due to its comparatively low functionality it shows only insufficient results in terms of corrosion protection, adhesion and reactivity. With ASKOCOAT™ we have succeeded in providing a polyol formulation that significantly improves these properties in all respects. The combination of an aromatic polymer backbone and a comparatively high OH number of 500 mg KOH/g is key to this, which makes ASKOCOAT™ an ideal crosslinking partner for OH-sensitive curing reactions (e.g. isocyanates)

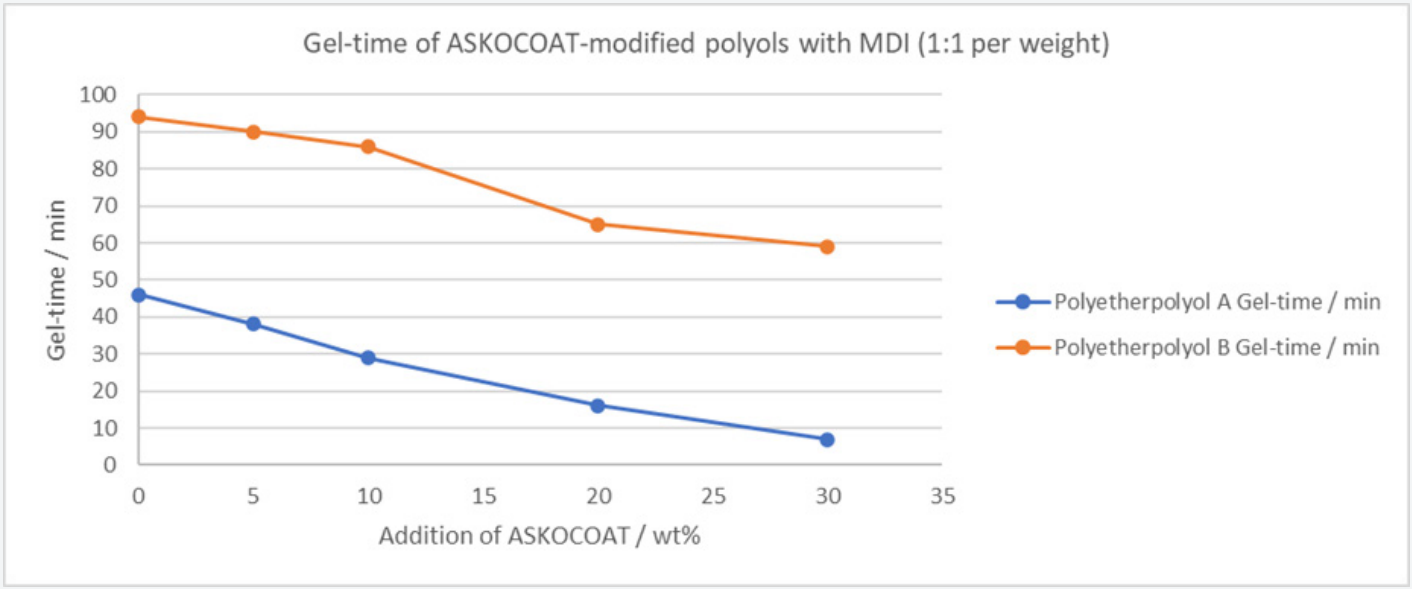


Figure 1: Effect of ASKOCOAT™ addition rate in different polyol types on gel time cured with MDI @25°C.

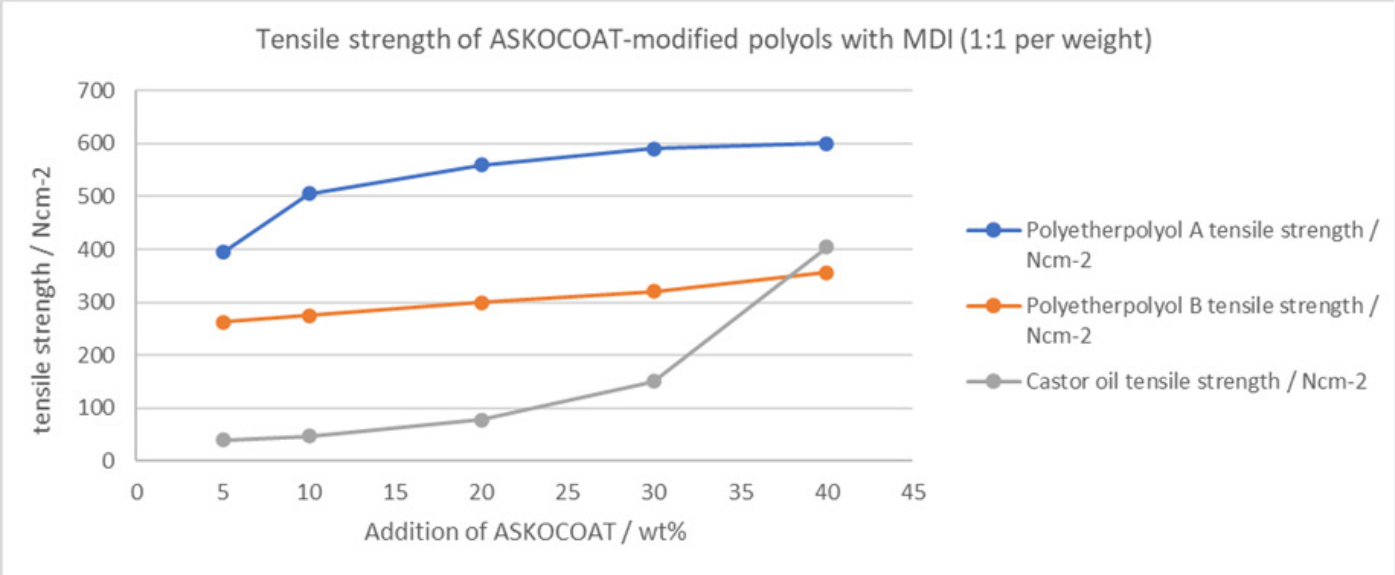


Figure 2: Effect of ASKOCOAT™ addition amount in different polyol types on final hardness, cured with MDI @25°C.

and delivers significant improvements in terms of metal adhesion and corrosion protection.

Due to its high compatibility, ASKOCOAT™ can be blended with all standard polyols, thereby improving the property profile of the co-polyols in equal measure. Various studies show that ASKOCOAT™ favors reactivity and reduces gel time. This significantly minimizes the separate addition of further catalysts (Figure 1).

ASKOCOAT™ is a polyol system that significantly improves the final parameters of common 2K polyurethane pouring compounds in terms of adhesion, corrosion protection, impact strength, reactivity and final hardness (Figure 2).

ADVANTAGES AT A GLANCE

- Improved adhesion to metal
- Excellent corrosion protection properties
- Self-catalyzing effect
- Good compatibility with other polyols
- Solvent-free